



HH1620 DSL VoIP Wireless Gateway

High-speed Internet access, SIP based IP telephony, and wireless and wired home networking access converge in one convenient package.



Gateway to the Connected Home

Easy to use. The Motorola HH1620 DSL VoIP Wireless Gateway unlocks the potential of offering high-speed data and voice-over-IP (VoIP) services to consumers.

Motorola's HH1620 DSL VoIP Wireless Gateway uses industry standard SIP signaling protocols to provide an all-in-one solution – offering users advanced ADSL technology for higher speeds and longer reach for their high-speed Internet access. It offers a full-featured home network router with a USB 2.0 host, USB 1.1 slave, and four 10/100 Base-T (RJ-45) Ethernet port connections, as well as an 802.11b/g wireless gateway for connecting computers, gaming consoles, or other peripherals. The HH1620 can power up to two lines of primary line VoIP telephone service (terminated in RJ-11 connectors) and is equipped with a PTSN fail-over protection feature in case of ADSL signal loss or power outage.

The Motorola HH1620 DSL VoIP Wireless Gateway is an intelligent way to communicate converging voice and data on one network. It enables:

- One infrastructure for communication services
- One bill for voice and data services
- Simultaneous use of phone lines and high-speed data services
- Advanced routing features allowing a consumer to connect multiple PC devices without the need for a stand-alone hub or router
- An integrated firewall to help provide Internet security
- Triple play platform intelligently prioritizes traffic to guarantee robust delivery of high quality video, voice, and data services all the way to the end user

As part of Motorola's broadband family of telephony products, the HH1620 combines voice, data, and networking functionality, in one product, on one network. By combining multiple services in one unit, consumers can enjoy an efficient solution that offers many advantages over competing technologies.

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VoIP

- Enables the delivery of up to 2 lines (RJ-11) of full-featured telephone service.
- Once the HH1620 is registered with a VoIP service, calls can be transparently routed over the Internet. A wide range of Class 5 telephony services are supported, including Caller ID, CLIR, call waiting, call forwarding, call transfer, and 3-way conference calling.
- PSTN fail-over protection is supported in the event of ADSL signal loss or power outage to ensure continuity of service when VoIP service is not available. Service providers can also define dial plans to automatically route calls over either PSTN or VoIP to allow optimization of end-user billing.
- Voice-over-data prioritization — allows users to talk on the phone without a reduction in voice quality while using the Internet.

Home Networking Made Easy

- Front panel, easy to read operational status LEDs
- Intuitive GUI-based configuration
- Equipped with a simple to use mobile pairing button that allows easy, secure mobile communication between the gateway and a myriad of mobile devices — such as laptops, desktops with wireless ability, printers, etc. — all with just one touch of a button, which is conveniently located on the top of the unit
- Can eliminate the cost and clutter of stand-alone routers, hubs, and wireless access points
- High-speed data access enabled through 4 port, 10/100 Base-T Ethernet (RJ-45) switch, a USB 2.0 host connection, and a USB 1.1 slave connection, as well as an 802.11 b/g wireless access point
- Extended 802.11g wireless coverage (up to 50% from the gateway) using advanced signal processing techniques

Security

- The HH1620 delivers advanced security using an SPI (Stateful Packet Inspection) firewall combined with an advanced NAT engine.
- An integrated Denial of Service (DoS) engine protects against a wide range of attack patterns and logs potential security breaches. A multi-level password allows configuration of different access policies for administrators and end-users.
- Powerful Wi-Fi[®] security is achieved through Wi-Fi certified WPA and WPA2 encryption and authentication, together with a MAC access control list.
- VPN pass-through is supported for secure remote access via IPSEC/PPTP/L2TP NAT tunneling.

Management

- HH1620 supports a comprehensive TR-069 data model, allowing zero touch provisioning and remote configuration of the gateway, including your VoIP service.

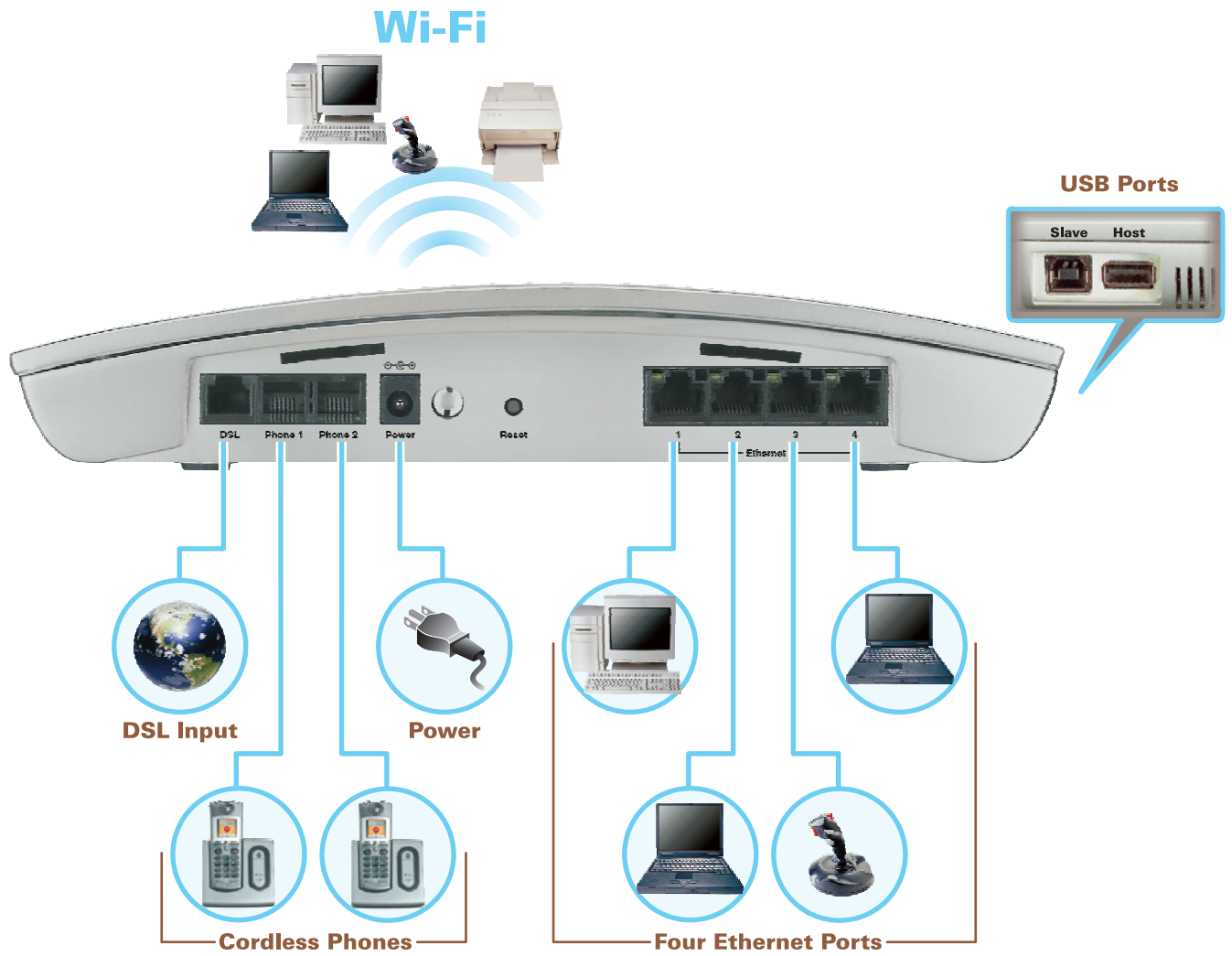


Figure 1: Sample HH1620 wiring diagram.

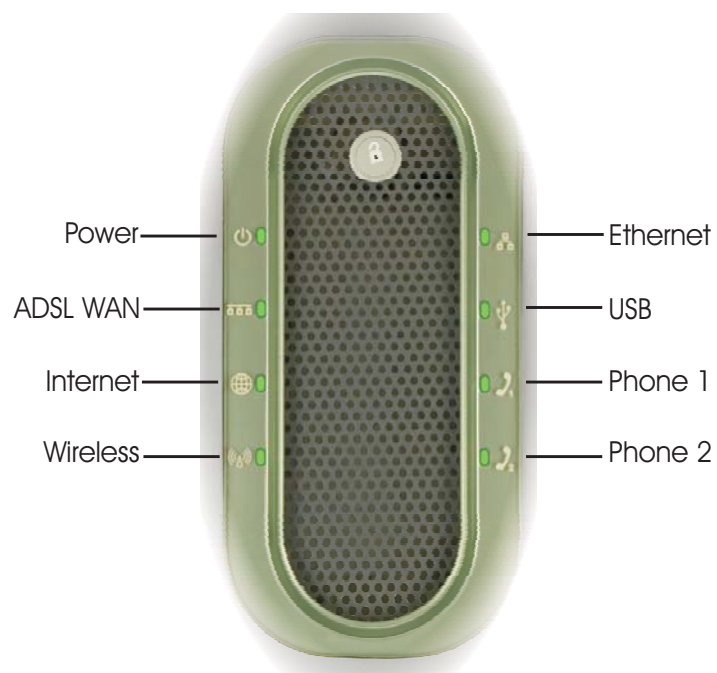


Figure 2: HH1620's easy-to-read operational status LEDs.

HARDWARE SPECIFICATIONS

Interfaces

Wireless:	compliant with IEEE 802.11b/g
LAN:	<ul style="list-style-type: none">• 4 Port Ethernet Switch (10/100Base-T)• USB 2.0 Host Connection and USB 1.1 Slave
WAN:	ADSL2/2+ line
VoIP:	<ul style="list-style-type: none">• SIP based• 2 FXS connections• PSTN Failover Protection

Dimensions: 10" L x 6.375" W x 1.75" H (254mm x 162mm x 44.5mm)

Temperature: 0° to 40° C (32° to 105° F)

AC Voltage: 100 to 120 V, 220 to 240 V

Frequency: 50/60 Hz

Humidity: 5% to 95%

ADSL MODEM SPECIFICATIONS

ADSL2/2+ (ANSI, ETSI, G.dmt for POTS and ISDN, G.lite and G.hs automode and selection)

VoIP: Audio codec: G711, software upgradeable to support G.723, G.726, and G.729

Wireless specifications:

- Wireless connection of one or more computers
- WPA and WPA2
- 64/128 bit WEP encryption
- Manual/auto channel selection

Security:

Firewall:

- Stateful Packet Inspection, Intrusion Logging and Reporting, Denial of Service protection
- VPN Functionality: NAT traversal (VPN pass-through) for IPSec, PPTP and L2TP VPNs
- Mode of Operation: Network Address Translation (NAT), static routing IP
 - Address Assignment: Static IP address assignment, internal DHCP server on LAN, DHCP client on WAN
- Secure Mobile Pairing with physical push button – SecureEasySetup™

Services:

- Static and Dynamic Routing with TCP/IP, VPN pass-through (IPSec, L2TP, PPTP), NAT, UDP, RIP, PPPoE, PPPoA, Classical IP, DNS, DHCP (client & server)
- Transparent bridging

Management:

- Web graphic user interface with protected user name and password, remotely accessible from designated IP addresses
- 8 Multi-color indicator lights on the front panel
- Supports TR-069 extensions TR-104 (VoIP provisioning) TR-098 (QoS provisioning)
- ATM Ping, DNS Ping, ICMP Ping, Traceroute
- Web-based remote gateway technician view and remote management
- Remote and host software download capability (web/HTTP, FTP)

Regulatory/Safety Approval:*

- CE Mark
- UL Listed (United States and Canada), EN 60950-1, IEC 60950-1
- ICES-003, RSS-210

* This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

Box Contents:

- 1 HH1620 Gateway
- Telephone cable (RJ-11)
- Ethernet cable (RJ-45)
- USB cable
- Micro filter x 2
- Power adapter and power cord
- Vertical Stand
- Quick installation guide
- Installation CD-ROM



Motorola, Inc. 101 Tournament Drive, Horsham, Pennsylvania 19044 U.S.A.
www.motorola.com

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